This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

| BLACK BORDERS
| IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
| FADED TEXT OR DRAWING
| BLURRED OR ILLEGIBLE TEXT OR DRAWING
| SKEWED/SLANTED IMAGES
| COLOR OR BLACK AND WHITE PHOTOGRAPHS
| GRAY SCALE DOCUMENTS
| LINES OR MARKS ON ORIGINAL DOCUMENT
| REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
| OTHER:

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.





United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE H-900-02 10/620,373 Ai Satoyama 9718 07/17/2003 **EXAMINER** 08/31/2004 24956 7590 MATTINGLY, STANGER & MALUR, P.C. KIM, HONG CHONG 1800 DIAGONAL ROAD ART UNIT PAPER NUMBER **SUITE 370** ALEXANDRIA, VA 22314 2186

DATE MAILED: 08/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. Applicant(s) App				
### Part Unit Hong C. Kim		Application No.	Applicant(s)	
Hong C Kim 2186		10/620,373	SATOYAMA ET AL.	
Prior MAIL/NG DATE of this communication appears on the cover sheet with the correspondence address - Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAIL/NG DATE OF THIS COMMUNICATION. 1 Elements of tear may be available under the provision of 3 CTR 1 135(a). In no event, however, may a neply be timely filled by the period for reply apposited above: is less than timity (30) days and use again \$2.0 MONTH from the mailing gate of this communication. 2 If NO period for reply a specified above: is less than timity (30) days, a reply within the statutory minimum of thinly (30) days will be considered timely. 3 If NO period for reply a specified above: is less than timity (30) days will be considered timely. 4 If the period for reply apposition distress, the statutory minimum of thinly (30) days will be considered timely. 4 If NO period for reply apposition to reply will, by statute, causes the application to become AdaMoNEQ (50 V S. 5 133). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant teem adjustment. See 37 CFR 1.704(b). 5 If NO period plant t	Office Action Summary	Examiner	Art Unit	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Entersions of three may be available under the Provisions of 37 CFR 1.35(s). In no event, however, may a nephy be timaly filed - Entersions of three may be available under the Provisions of 37 CFR 1.35(s). In no event, however, may a nephy be timaly filed - Entersions of three may be available under the Provisions of 37 CFR 1.35(s). In no event, however, may a nephy be timaly filed - If NO people for may be available under the provisions of 37 CFR 1.35(s). In no event, however, may a nephy be timaly filed - If NO people for may be available under the provisions of 37 CFR 1.35(s). In no event, however, may a nephy be timaly filed - If NO people for may be available under the provisions of 37 CFR 1.35(s). In operation of 37 CFR 1.35(s). - If NO people for may be available under the mailing date of this communication. - If NO people for may be available under the mailing date of this communication. - If NO people for may be available under the mailing date of this communication. - If NO people for may be available under the mailing date of this communication. - If NO people for may be available under the mailing date of this communication. - If NO people for the available under the mailing date of this communication. - If NO people for the available under the mailing date of this communication. - If NO people for the available under the mailing date of this communication. - If NO people for the available under the mailing date of this communication. - If NO people for the available under the mailing date of this communication. - If NO people for the provision of the provision of the formal matters, prosecution as to the merits is closed in accordance with the practice under Exp and Exp an		Hong C Kim	2186	
THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the proxime of 3 or IR.1 15(b). In no event, however, may a reply be timely field after SX (b) MONTIS from the availing date of this communication. - In Control to reply without the proxime of the communication of the				
1) Responsive to communication(s) filed on 17 July 2003. 2e) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 9-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are allowed. 7) Claim(s) is/are objected to . 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received in Application No. 09/506.271. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	 THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any 			
2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 9-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received in Application No. 09/506,271. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of References Cited (PTO-1449 or PTO/S808) 5) Notice of Informal Patent Application (PTO-152)	Status			
3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 9-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 5) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are objected to by the Examiner. 10) The grawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) he held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/506.271. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 1) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Discobsure Statement(s) (PTO-1449 or PTO/S808)	1) Responsive to communication(s) filed on 17 July	uly 2003.		
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 9-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5 Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) is/are objected to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * Ol None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/506,271. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) Paper No(s)/Mail Date.	2a) This action is FINAL . 2b) This action is non-final.			
Disposition of Claims 4) ○ Claim(s) 9-20 is/are pending in the application. 4a) Of the above claim(s)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
4)	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.			
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ☒ Claim(s) 9-20 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. ☒ Certified copies of the priority documents have been received in Application No. 09/506;271. 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of References Cited (PTO-82) □ Notice of Draftsperson's Patent Drawing Review (PTO-948) □ Notice of Draftsperson's Patent Drawing Review (PTO-948) □ Notice of Informal Patent Application (PTO-152)	Disposition of Claims			
5)	4)⊠ Claim(s) <u>9-20</u> is/are pending in the application.			
6) Claim(s) 9-20 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are objected to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1.	4a) Of the above claim(s) is/are withdrawn from consideration.			
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/506,271. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Interview Summary (PTO-413) Paper No(s)/Mail Date. 1) Notice of Information Disclosure Statement(s) (PTO-1449 or PTO/S8/08)	5) Claim(s) is/are allowed.			
8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/506,271. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Praftsperson's Patent Drawing Review (PTO-948) 3) Interview Summary (PTO-413) Paper No(s)/Mail Date. 5) Notice of Informal Patent Application (PTO-152)	6) Claim(s) 9-20 is/are rejected.			
Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☑ Certified copies of the priority documents have been received in Application No. 09/506,271. 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of Breferences Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Interview Summany (PTO-413) Paper No(s)/Mail Date 5) ☐ Notice of Informal Patent Application (PTO-152)				
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/506,271. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) Attachment(s) 1) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/5B/08) 5) Notice of Informal Patent Application (PTO-152)	8) Claim(s) are subject to restriction and/or election requirement.			
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/506,271. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 10 Notice of Informal Patent Application (PTO-152)	Application Papers			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some clim None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/506,271, 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	9) The specification is objected to by the Examiner.			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) One * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/506,271. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.			
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☒ Certified copies of the priority documents have been received in Application No. 09/506,271. 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Priority under 35 U.S.C. § 119 12) △ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) △ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. △ Certified copies of the priority documents have been received in Application No. 09/506,271. 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) △ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) △ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/506;271. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
a) ⊠ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☒ Certified copies of the priority documents have been received in Application No. 09/506;271. 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)	Priority under 35 U.S.C. § 119			
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)	a)⊠ All b)□ Some * c)□ None of: 1.□ Certified copies of the priority documents have been received.			
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) * See the attached detailed Office action for a list of the certified copies not received. 4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date Paper No(s)/Mail Date				
* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) * See the attached detailed Office action for a list of the certified copies not received. 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)	See the attached detailed Office action for a list of the certified copies not received.			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)	Attachment(s)			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)		4) 🔲 Interview Summar	y (PTO-413)	
of Million margin biosiocaro citatomoni(o) (i to tito citatomoni(o) (i				
	1 -		r atom replication (i TO-TOE)	

Art Unit: 2186

Detailed Action

- 1. Claims 9-20 are presented for examination. This office action is in response to the application filed on 7/17/03
- 2. Applicants are requested to update the status of the related U.S. patent application referred on page 1 in the application filed (i.e. application Serial Nos. 08/912,872) and the status of the related U.S. patent application, 09/477,713, accordingly (e.g., U.S. Patent Application Serial No. ##/###,### filled Sept. 07, 1990, now abandoned; ..., now U.S. Patent #,###,### issued Jan. 01, 1994; or This application is a continuation of Serial Number ##/###, filed on December 01, 1990, now abandoned; ...etc.). Also applicants are requested to include the status of the related U.S. applications or patents in the CROSS-REFERENCE TO RELATED APPLICATIONS section and in any other corresponding area in the specification.

Information Disclosure Statement

Applicants are reminded of the duty to disclose information under 37 CFR 1.56
 (i.e. search report).

Priority

4. Applicant is reminded that in order for a patent issuing on the instant application to obtain the benefit of priority based on priority papers filed in parent Application No. 09/506,271 under 35 U.S.C. 119(a)-(d) or (f), a claim for such foreign priority must be

Art Unit: 2186

timely made in this application. To satisfy the requirement of 37 CFR 1.55(a)(2) for a certified copy of the foreign application, applicant may simply identify the application containing the certified copy.

- 5. The drawings are objected to because:
- 1. Figure 5, each box in Ref. 600 needs a label for clarification.. Correction is required.

Claim Objections

6. Claim 10 is objected to because of the following informalities: It appears that "calim1" should be changed to –claim 9—for clarity. Appropriate correction is required.

DOUBLE-PATENTING

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 2186

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 9-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,615,327. Claims of patent No. 6,615,327 contains every element of claims 9-20 of the instant application and as such anticipates claims 9-20 of the instant application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 9. Claim 9-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Kanda et

Art Unit: 2186

al. (Kanda) US Patent 6,115,797.

As to claim 9, Kanda discloses the invention as claimed. Kanda discloses in a computer system which has a first computer (Fig. 6 Ref. 11), a second computer (Fig. 6 Ref. 10) connected to said first computer via network (Fig. 6 Refs. 65 and 75), a storage apparatus (Fig. 6 Ref. 400) connected to said second computer via fixed length access interface (Fig. 6 Ref. 90) and storing data in a fixed-length block format used by said second computer, a method for processing data stored in said storage apparatus to said first computer comprising the steps of:

requesting, from said first computer to said second computer via network, data stored in said storage apparatus in said fixed-length block format (col. 14 lines 8-12);

reading, in response to said request data in said fixed-length block format from said storage apparatus via said fixed length access interface and transferring said read data to said first computer via network, by using said second computer (col.14 lines 8-12);

converting, in said first computer, said transferred data in said fixed-length block format to data in variable-length block format (col.14 lines 12-14); and

processing said converted data in said first computer (col.4 lines 65-66, read a block reads on this limitation).

As to claim 10, Kanda discloses the invention as claimed the above. Kanda further discloses making volume information for accessing data stored in said storage apparatus, in said first computer (col. 5 lines 50-53).

Art Unit: 2186

As to claim 11, Kanda discloses the invention as claimed the above. Kanda further discloses said step for making said volume information comprising a step for storing said volume information in a predetermined region formed in a main memory of said first computer (col. 5 lines 48+).

As to claim 12, Kanda discloses the invention as claimed the above. Kanda further discloses said volume information which includes information of a starting position and an ending position of data is said fixed-length block format in said storage apparatus (col. 5 lines 48+).

As to claim 13, Kanda discloses the invention as claimed. Kanda discloses a computer in a variable length block format comprising (Fig. 9):

a communication unit (Fig. 9 Refs. 65 and 75) to communicate with another computer which is connected to a storage apparatus,

a processor (Fig. 9 Ref. 11) and,

a memory (fig. 9 Ref. 21)

wherein said processor requests said another computer to send data stored in said storage apparatus in fixed-length block format through said communication unit, receives said data from said another computer through said communication unit,

Art Unit: 2186

converts said data to data in variable-length block format, and processes said converted data (col. 14 lines 8-22).

As to claim 14, Kanda discloses the invention as claimed the above. Kanda further discloses make volume information for accessing data stored in said storage apparatus (col. 5 lines 50-53).

As to claim 15, Kanda discloses the invention as claimed the above. Kanda further discloses said processor stores said volume information in a predetermined region formed in a main memory of said first computer (col. 5 lines 48+).

As to claim 16, Kanda discloses the invention as claimed the above. Kanda further discloses said volume information which includes information of a starting position and an ending position of data is said fixed-length block format in said storage apparatus (col. 5 lines 48+).

As to claim 17, Kanda discloses the invention as claimed. Kanda discloses a system (Fig. 9) comprising:

a first computer (Fig. 9 Ref. 11),

a second computer (Fig. 9 Ref. 10) connected to said first computer through network, a storage apparatus storing data in a fixed-length block format connected to said second computer via a fixed length access interface (Fig. 9 Ref. 90),

Art Unit: 2186

wherein said first computer requests said second computer to send data stored in said storage apparatus (col. 14 lines 8-22),

wherein said second computer reads said data stored in said storage apparatus via said fixed length access interface and transfers said data to said first computer via network based on said request (col. 14 lines 8-22), and

wherein said first computer receives said transferred data, converts said received data to a variable-length block format, and processes said converted data (col. 14 lines 8-22).

As to claim 18, Kanda discloses the invention as claimed the above. Kanda further discloses said processor makes volume information for accessing data stored in said storage apparatus (col. 5 lines 50-53).

As to claim 19, Kanda discloses the invention as claimed the above. Kanda further discloses said processor stores said volume information in a predetermined region formed in a main memory of said first computer (col. 5 lines 48+).

As to claim 20, Kanda discloses the invention as claimed the above. Kanda further discloses said volume information which includes information of a starting position and an ending position of data is said fixed-length block format in said storage apparatus (col. 5 lines 48+).

Art Unit: 2186

Conclusion

- The prior art made of record and not relied upon is considered pertinent to 10. See attached PTO-892. applicant's disclosure.
- A shortened statutory period for response to this action is set to expire 3 (three) 11. months and 0 (zero) days from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 USC 133, MPEP 710.02, 710.02(b)).
- When responding to the office action, Applicant is advised to clearly point out the 12. patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. ' 1.111(c).
- When responding to the office action, Applicants are advised to provide the 13. examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.
- Any inquiry concerning this communication or earlier communications from the 14. examiner should be directed to Hong C Kim whose telephone number is 703-305-3835. The examiner can normally be reached on M-F 9:00 to 6:00.

Art Unit: 2186

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt M Kim can be reached on (703) 305-3821. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the 15. Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to: 16.

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to TC-2100:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

HK

Primary Patent Examiner

August 30, 2004